

16. A phytase that is encoded by a DNA sequence that is at least 95.88% identical to nucleotides 12-1412 of the DNA sequence of SEQ ID NO: 25, wherein the % identity is determined by GAP provided in the GCG program package.

17. A phytase that comprises:

(a) an amino acid sequence of SEQ ID NO: 26 or amino acid residues 1-441 of SEQ ID NO: 26; or

(b) an amino acid sequence encoded by nucleotides 12-1412 or 90-1412 of SEQ ID NO: 25.

18. A phytase comprising:

(a) an amino acid sequence of SEQ ID NO: 31.

(b) an amino acid sequence of SEQ ID NO: 31 in which the amino acid residue at position 24 is glutamine,

(c) an amino acid sequence of SEQ ID NO: 31 in which the amino acid residue at position 65 is lysine,

(d) an amino acid sequence of SEQ ID NO: 31 in which the amino acid residue at position 24 is glutamine and the amino acid residue at position 65 is lysine,

(e) an amino acid sequence of residues 1-441 of any of (a) - (d), or

(f) an amino acid sequence encoded by nucleotides 1-1401 or 79-1401 of SEQ ID NO: 30.

19. A phytase comprising:

(a) an amino acid sequence of SEQ ID NO: 29.

(b) an amino acid sequence of SEQ ID NO: 29 in which the amino acid residue at position 24 is glutamine,

(c) an amino acid sequence of SEQ ID NO: 29 in which the amino acid residue at position 65 is lysine,

(d) an amino acid sequence of SEQ ID NO: 29 in which the amino acid residue at position 24 is glutamine and the amino acid residue at position 65 is lysine.

(e) an amino acid sequence of residues 1-441 of any of (a) - (d), or

(f) an amino acid sequence encoded by nucleotides 1-1401 or 79-1401 of SEQ ID NO: 28.

- Sub
D2
ans
C'
incl.*
20. A phytase comprising an amino acid sequence of SEQ ID NO: 27.
21. A food or feed composition comprising a phytase of claim 15.
22. A food or feed composition comprising a phytase of claim 16.
23. A food or feed composition comprising a phytase of claim 17.
24. A food or feed composition comprising a phytase of claim 18.
25. A food or feed composition comprising a phytase of claim 19.
26. A food or feed composition comprising a phytase of claim 20.